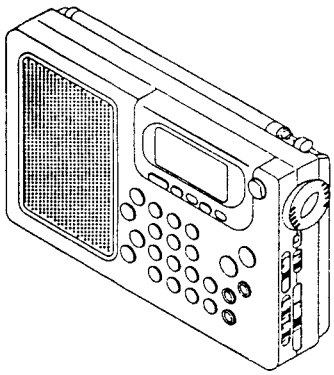
S/M Code No.92－018 DATE OF ISSUE 12/1992－SZ

aiwa

WR-D1000

SERVICE MANUAL



STEREO RADIO

● TYPE. D,Y

● 製品コード： 81RM2－0117

SPECIFICATIONS

Frequency range:
FM: 76 － 108 MHz (100/50kHz STEP)
LW: 150 － 519 kHz
AM: 520 － 1710 kHz (10/9kHz STEP)
SW: 1.711 － 29.999 MHz
Maximum output:
Using batteries
Headphones 10mW＋10mW (EIAJ/32Ω)
Speaker 400mW (EIAJ/8Ω)
Power source:
Battery DC 6V, LR-6 (UM-3,AA,R6)x4
Domestic AC power (using optional AC adaptor)
Battery life:
Dry cell batteries (UM-3)
Approx. 7.5 hrs. (FM) (speaker)
Approx. 8.0 hrs. (FM) (headphones)
Dimensions:
220(W)x129(H)x40(D) mm
8.66(W)x5.08(H)x1.57(D) inches
Weight:
Approx. 725 g (25.6 oz) incl. dry cell batteries

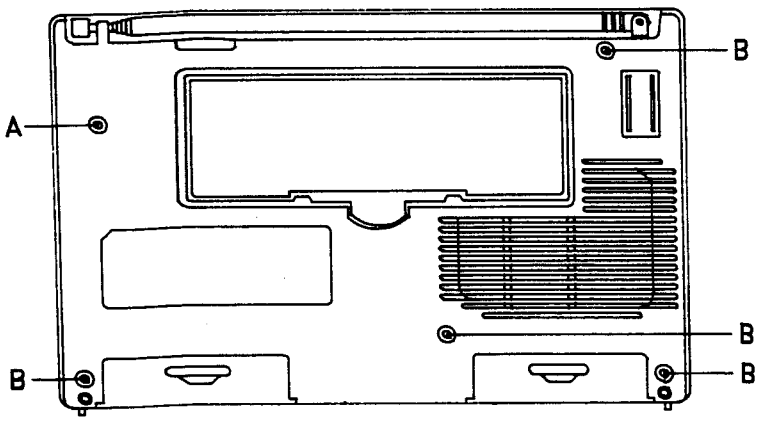
• Design and specifications are subject to change without notice.

サービス技術ニュース	
番号	連絡内容
G－ －	
G－ －	
G－ －	

アイワ株式会社
AIWA CO.,LTD.
Tokyo Japan
〒110 東京都台東区池之端1－2－11 ☎03 (3827) 3111 (代表)
Printed in Japan

GA

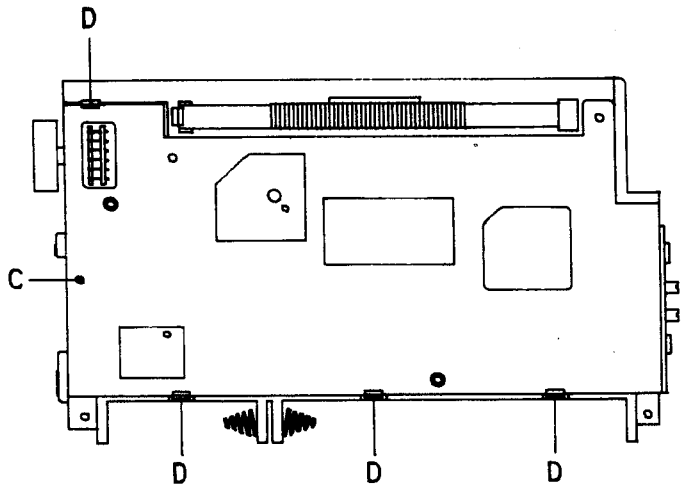
DISASSEMBLY INSTRUCTIONS



TO REMOVE BACK COVER

a. Unscrew 1 screw A.
and 4 PTP screws B.

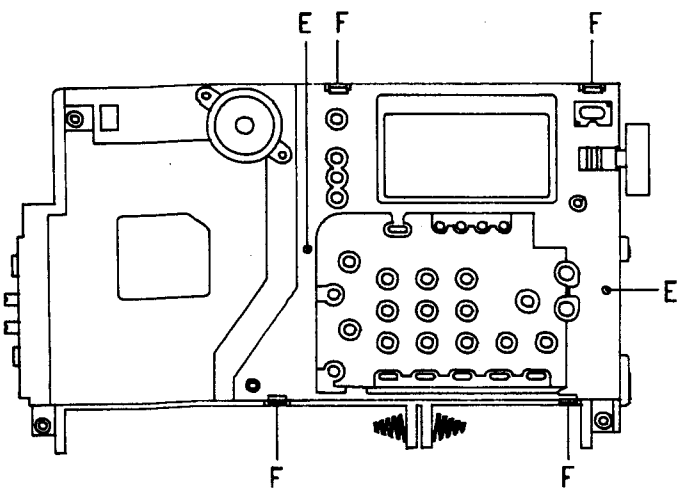
b. Separate front and back cabinet.



TO REMOVE MAIN PCB

a. Remove screw C.

b. Release Main PCB from hooks D
to remove it.



TO REMOVE CONTROL PCB

a. Unscrew 2 screws E.

b. Release Control PCB from hooks F
to remove it.

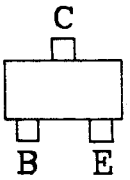
ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	CODE	DESCRIPTION
=====IC=====			
	87-020-487-010	1F	IC TA7758P
	S1-010-031-000	1D	IC AN7415S
	S1-010-000-000	1B	IC AN7117
	S1-010-140-000	1D	IC LA5003
	S1-011-040-000	1D	IC TA75339F
	S1-011-050-000	1F	IC TC40H148F
	S1-010-430-000	2P	IC CXD1118M-1
	S1-000-021-000	2C	IC μPD75308GF-508-3B9
	S1-011-360-000	1C	IC S-81230AG-RB-T2
	S1-011-390-000	1B	IC TC4S11F
=====TRANSISTOR=====			
	87-026-183-010	1A	FET 2SK212E
	S1-030-061-000	1D	FET 2SK291R
	S1-030-070-000	1A	FET 2SK381A
	S1-030-071-000	1A	FET 2SK381B
	S1-030-060-000	1D	FET 2SK291Q 2SK152-3
	S1-020-181-000	1A	TR 2SC2999D
	S1-022-000-000	0E	TR 2SC2839E
	S1-020-180-000	1A	TR 2SC2999E
	S1-022-021-000	0E	TR 2SC3330U
	S1-022-020-000	0E	TR 2SC3330S
	S1-022-023-100	0E	TR 2SC3330T/U
	S1-020-273-100	0E	TR 2SA1317T/U
	89-410-126-010	0E	TR 2SD1012G
	89-110-203-010	1A	TR 2SA1020Y
	89-316-236-010	0E	TR 2SC1623 L6
	89-108-126-010	0E	TR 2SA812 M6
	89-208-151-010	0E	TR 2SB815 B6/B7
=====DIODE=====			
	S1-040-020-000	0E	DIODE 1N4148
	S1-042-010-T00	1A	DIODE 1SS238
	S1-043-060-000	1B	VARACTOR SVC203 (AA1/AA2)
	S1-040-020-T00	0E	DIODE 1N4148TR
	S1-040-030-000	0E	DIODE 1N60
	S1-044-010-000	1A	DIODE KB362 MA27T-A
	87-027-499-010	0E	ZENER UZ-15BH
	S1-058-010-000	1A	LED 3φ(GRN)
	S1-042-040-000	0E	DIODE 1S2835 A3
	S1-046-010-000	0E	DIODE RLS4148
	S1-042-030-000	1A	DIODE 1S2837 A5
	S1-046-000-T00	1B	DIODE 1SS98 -T2
====MAIN CIRCUIT BOARD SECTION=====			
C20,C28,C44,C80,C84	★87-010-378-010	0E	ELECT 10/16V
C55,C75,C119,C120	τ87-010-374-010	0E	ELECT 47/10V
C56	★87-010-379-010	0E	ELECT 22/16V
C58,C63,C64,C70,C76	★87-010-401-010	0E	ELECT 1/50V
C61	★87-015-391-010	1A	ELECT 0.22/50
C62	★87-010-400-010	0E	ELECT 0.47/50V
C67,C110,C118,C121,C122,C124	★87-010-263-010	0E	ELECT 100/10V
C100,C101	★87-015-965-010	0E	ELECT 1/50V
C73,C74,C111,C112	★87-015-961-010	0E	ELECT 0.1/50V
C126	★87-010-236-000	1B	ELECT 1000/10V
JK1	★S1-649-021-000	1C	JACK HSJ 0912-01-022
JK3	★S1-640-060-000	1D	JACK HSJ 0914-01-040
JK2	★S1-647-040-000	1B	JACK DC(E)
L1	★S1-132-900-000	1A	FIXED COIL 22μH
L2	★S1-134-000-000	1A	FIXED COIL 180μH
L3,L13	★S1-130-800-000	1A	FIXED COIL 0.39μH
L4	★S1-134-100-000	1A	FIXED COIL 220μH
L5	★S1-130-500-000	1A	FIXED COIL 0.22μH
L6,L12	★S1-130-900-000	1A	FIXED COIL 0.47μH
L7	★S1-131-300-000	1A	FIXED COIL 1μH
L8	★S1-131-500-000	1A	FIXED COIL 1.5μH
L10	★S1-131-370-000	1A	FIXED COIL 1μH
L11	★S1-133-300-000	1A	FIXED COIL 47μH
L14,17	★S1-131-700-000	1A	FIXED COIL 2.2μH
L15,L16,L18,L21	★S1-132-400-000	1A	FIXED COIL 8.2μH
L19,L20	★S1-135-100-000	1A	FIXED COIL 1.5mmH
S1,S3	★S1-630-280-000	1B	SW SLHA-12BP04
S2	★S1-630-070-000	1C	SW SSSS422NA1-SG
SVR1,SVR3,SVR4,SVR5	★S1-320-000-000	1A	SVR 10KB 7PNHX-10KB
SVR2	★S1-320-070-000	1A	SVR 1MB 7PNHX-1MB
T1	★S1-122-211-000	1B	ADJ COIL 0258-404-W038B [Y1,YJ1,YZ1,YU1]
T2	★S1-122-220-000	1B	ADJ COIL 0258-404-W039B [Y1,YJ1,YZ1,YU1]
T3	★S1-122-231-000	1A	IFT 4143-404-W188
T4	★S1-150-000-000	1D	TOROID COIL 720μH
T5	★S1-122-420-000	1B	ADJ COIL 0237-404-W525
T6	★S1-122-260-000	1B	ADJ COIL 0237-404-W402
T7	★S1-122-300-000	1B	ADJ COIL 0237-404-W322A
T8	★S1-122-270-000	1A	IFT 4140-404-W121
T9,T11	★S1-122-280-000	1A	IFT 2150-404-W387B
T10	★S1-122-250-000	1A	IFT 2153-404-W275
T13	★S1-122-440-000	1B	ADJ COIL 0258-404-W040A
T14	★S1-122-290-000	1A	ADJ COIL 4140-404-W120A
TC1,TC2	★S1-210-010-000	1B	TC 10PF 2222-808-23109
VR1	★S1-300-020-000	1E	VR 50KAx2
X1	★S1-650-020-000	1E	X'TAL 55.405MHZ
C94	★87-010-404-010	0E	ELECT 4.7/50V
C104	★87-015-972-010	0E	ELECT 10/16V
C105,C107	★87-010-248-010	0E	ELECT 220/10V
C117	★87-010-248-010	0E	ELECT 220/10V
C123	★87-010-221-010	0E	ELECT 470/10V
CF1,CF2	★S1-660-080-000	1B	CF SFE10.7MA8-A
CF3	★S1-660-170-000	1H	CF SFP450I
CF4	★S1-660-360-000	2A	CF SFR450J

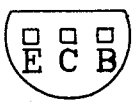
REF.NO.	PART NO.	CODE	DESCRIPTION
LF1	★S1-122-200-000	—	LC FILTER 0247-036
MCF1	★S1-650-041-000	2M	MCF 55.845 MHz
T1	★S1-122-660-000	1B	ADJ COIL 2660 (B)
T2	★S1-122-650-000	1B	ADJ COIL 2650 (B)
T12	★S1-136-100-000	1B	FIXED COIL 10mmH
＝＝＝＝＝**CONTROL CIRCUIT BOARD SECTION**＝＝＝＝＝			
C219	★87-015-975-010	0E	ELECT 220/6.3V
C229	★87-015-972-010	0E	ELECT 10/16V
C240,C243	★87-010-367-010	0E	ELECT 4.7/25V
C241	★87-010-079-010	0E	ELECT 100/6.3V
LCD1	★S1-600-150-000	2B	LCD
S201	★S1-630-280-000	1B	SW SLHA-12BP04
S202	★S1-630-280-000	1B	SW SLHA-12BP04
S203	★S1-630-440-000	1C	SWITCH SSSS2-S-011
S204	★S1-630-040-000	1B	SWITCH SSSS2-S-019
TC201	★S1-210-003-000	1B	TRIMMER 10PF VCT 31C213A
TC202	★S1-210-000-000	1B	TRIMMER 20PF VCT 31E122A
X201	★S1-650-031-000	1D	X'TAL 4.500MHZ
X202	★S1-650-071-000	1D	X'TAL 4.194304MHZ
＝＝＝＝＝**ENCODER CIRCUIT BOARD SECTION**＝＝＝＝＝			
VR2	★S1-730-000-000	2A	ROTARY ENCODER EVQ-WWH
＝＝＝＝＝**MISCELLANEOUS**＝＝＝＝＝			
ANT1	★S1-110-360-000	1D	BAR & COIL
SP2	★S1-625-000-000	1D	PIEZO BUZZER 20235
SP1	★S1-620-030-000	2A	SPEAKER 3" 8Ω 0.5W

2SK212

2SC2999
2SC2839
2SC3330
2SA1317
2SD1012

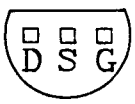


2SC1623
2SA812
2SB815



2SA1020

2SK361



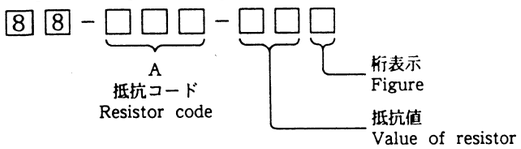
2SK291

PRACTICAL SERVICE FIGURE

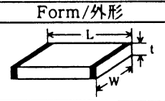
Sensitivity:	FM	16 ± 4dB (at 92.0 MHz)
(IHF, THD 3%)	MW	54 ± 4dB (at 1000 kHz)
(S/N 10dB)	LW	60 ± 4dB (at 218 kHz)
	SW	18 ± 4dB (at 2300 kHz)
		16 ± 4dB (at 15100 kHz)
		16 ± 4dB (at 25600 kHz)
Intermediate Frequency:	AM 1ST.IF. 55.845 MHz	
	2ND.IF.450 kHz	
	FM 10.7 MHz ± 0.05 MHz	
Stereo Separation:	FM 18 ± 4dB (at 1 kHz)	

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip resistor part coding

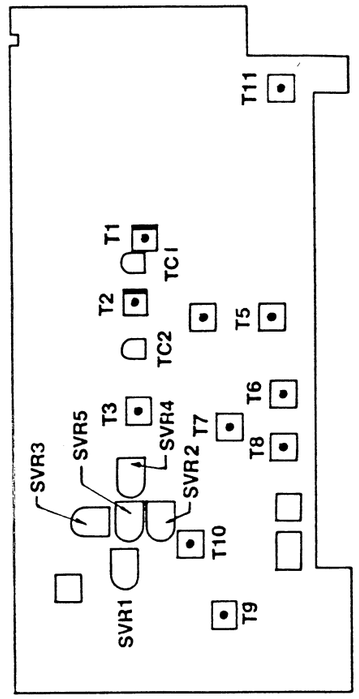


チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form/外形	L	W	t	Resistor code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128

ADJUSTMENT

MAIN PCB



① **AM 2ND IF Adjustment**
T7 ..... 55.394858-55.395150 MHz

② **AM 1ST IF Adjustment**
T8,T9 ..... 450 kHz

③ **FM,IF Adjustment**
T3,T10 ..... 10.7 MHz

④ **AM Sensitivity.Adj**
T5,T6 ..... 450 kHz

⑤ **FM Sensitivity.Adj**
T1,T2 ..... 80 MHz
TC1,TC2 ..... 104 MHz

⑥ **FM Mpx. Adj**
SVR1 ..... 18.95-19.05 kHz

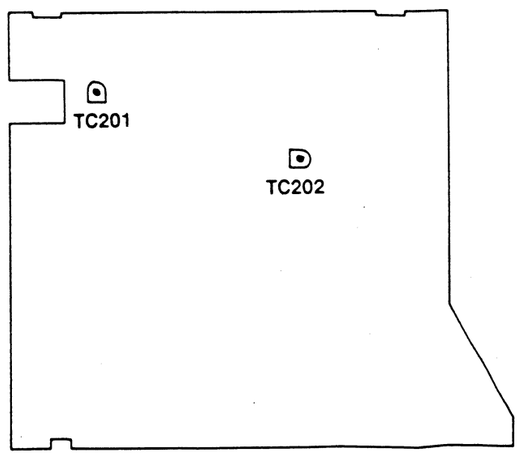
⑦ **Indication Level Of Battery**
SVR5 ..... 2th. scale

⑧ **Signal Strength Levelatery**
FM. SVR4 ..... 6th. scale
AM. SVR3 ..... 5th. scale

⑨ **AM Adjustment**
T11 ..... 450 kHz

⑩ **FM Station Delect**
SVR2 ..... 0.3V

CONTROL PCB



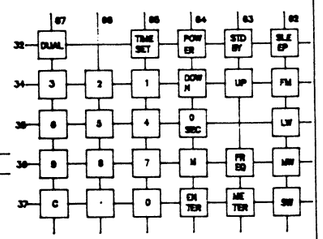
① **Clock Time Accuracy**
TC202 ..... 52.4288 ± 4 MHz

② **Pll Frequency. Adj**
TC201 ..... 97.29975-97.30025 MHz

IC DESCRIPTION

IC,UPD75308-508-3B9

PIN.NO	I/O	DESCRIPTION
1-15 69-80	O	LCD SEGMENT DRIVER OUTPUTS
21-24	O	LCD BACKPLANE DRIVER OUTPUTS
16	O	NOT USED AND WITHOUT ANY FUNCTION SET
17	O	RADIO ON N FM RECEPTION: H RADIO ON BUT W/O FM RECEPTION: L RADIO OFF: H
18	O	RADIO ON BUT W/O FM RECEPTION: H RADIO ON N FM RECEPTION: L RADIO OFF: H
19	O	RADIO ON N MW RECEPTION: H RADIO ON BUT W/O MW RECEPTION: L RADIO OFF: H
20	O	RADIO ON N SW RECEPTION: H RADIO ON BUT W/O SW RECEPTION: L RADIO OFF: H
25	O	LCD POWER SUPPLY BIAS CONTROL
26-28	I	LCD BIAS VOLTAGE INPUT
29	O	DATA
30	O	CLOCK
31	O	LATCH FOR TRANSMISSION OF REFERENCE DIVIDER FREQ. DIVISION NUMBER AND PROGRAMMABLE DIVIDER FREQ. DIVISION NUMBER
32 34-37 60-67	O I	KEY MATRIX - STROBE OUTPUT * KEY MATRIX - INPUT * D214, D215, D216: MODE SELECT FOR DIFFERENT AREA DEMAND D214: FOR FM76-108MHz D215: FOR STOP FREQ. AT AM26100kHz D216: FOR FM AUTO SCAN'S STEP AT 100kHz
33		VSS
38	I	* INHIBIT INPUT * RADIO ON CAN BE CONTINUED ONLY WHEN INPUT IS H * USUAL POWER SUPPLY - IF THERE IS ENOUGH BATTERY VOLTAGE, POWER SUPPLYS AT H EVEN RADIO IS OFF.
39	I	* SIGNAL STRENGTH LEVEL/BATTERY LEVEL INDICATION
40		* INDICATION AND INPUT:
41		0 1 2 3 4 5 6 7 39 H L H L H L H L 40 H H L L H H L L 41 H H H H L L L L # WHEN INDICATION IS OVER INPUT 'Z', STOP AM AUTO SCAN
42-43	I	ROTARY ENCODER INPUT
44	I	WHEN INPUT IS L, STOP FM AUTO SCAN
45	I	* CONTROL 'STEREO' INDICATION OR NOT ON LCD * STEREO INDICATION ONLY WHEN INPUT L, RADIO ON N FM RECEPTION
46	O	* BUZZER OUTPUT: ALARM AND BEEP SOUNDS * NO OUTPUT: L
50	O	* HWS BUZZER ALARM CONTROL
51		* OUTPUT STEP AND TIME:
52		TIME 0 5 10 15 20 25 30 35 SEC LSB 50 L H L H L H L H 51 L L H H L L H H MSB 52 L L L L H H H H H: HIGH IMPEDANCE * W/O ALARM OUTPUT: HIGH IMPEDANCE
47	O	MUTE OUTPUT: ACTIVE H
48	O	* CHECK PIN WITH MAIN SYSTEM CLOCK FREQ.: AT SLEEP STATUS AND WHEN PIN 38 INHIBIT IS L, 524288Hz SQUARE WAVE IS CONTINUOUSLY OUTPUT * OUTPUT PIN OF TIMER START: TIMER START BY STANDBY, OUTPUT IS H AT FIRST ONE SEC.
49	O	* BATTERY LEVEL INDICATION IS H AT FIRST 60-80MS * OTHERS : L
53	O	RADIO ON: H RADIO OFF: L
54		VDD. APPLY VOLTAGE FROM 2.8 TO 3.1V
55		* SUBSYSTEM CLOCK OSCILLATION
56		* NOT NECESSARY IN UPD75308-508-3B9
57		NO CONNECTION
58-59		MAIN SYSTEM CLOCK OSCILLATION
68	I	* RESET INPUT * NORMAL: H INITIALIZED: L



ICS' & TRANSISTORS' VOLTAGE LIST

IC1

PIN NO.	FM	AM
1	4.39	3.80
2	1.66	1.66
3	1.83	1.60
4	1.27	1.79
5	1.38	1.60
6	1.38	1.60
7	5.04	4.99
8	2.60	2.25
9	5.04	4.99
10	4.93	0
11	0	0
12	1.50	1.59
13	0	2.35
14	2.97	2.97
15	1.12	1.08
16	1.12	1.08
17	2.38	2.33
18	1.77	1.46
19	1.66	1.66
20	1.66	1.66

IC2

PIN NO.	FM	AM
1	2.86	2.86
2	0.46	0.46
3	0.46	0.46
4	0.93	0.93
5	0.93	0.93
6	0.02	0.02
7	2.99	2.99
8	0	0
9	1.04	1.04
10	0.45	0.45
11	1.17	1.17
12	1.32	1.32
13	1.43	1.43
14	1.15	1.15
15	1.15	1.15
16	0.02	0.02

IC4

PIN NO.	FM	AM
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0

IC3

PIN NO.	FM	AM
1	2.76	2.76
2	0	0
3	2.76	2.76
4	2.75	2.75
5	2.74	2.74
6	5.92	5.92
7	4.65	4.65
8	3.34	3.34
9	5.97	5.97

IC5

PIN NO.	FM	AM
1	5.05	5.00
2	0	0
3	3.00	3.00
4	4.30	4.25

TESTING CONDITION:

1. WITHOUT ANY INPUT SIGNAL AND SETTING VOLUME TO MIN.
2. SPEAKER MODE.
3. EXTERNAL ANT. IS NOT USED.
4. AM IS RECEIVED BY 150kHz AND PUT ON THE WIDE BW & LOCAL POSITION.
5. FM IS RECEIVED BY 98MHz AND PUT ON THE STEREO POSITION.
6. LOAD IN RADIO BATTERY 6.0V AND BACK UP BATTERY 3.0V.
7. UNIT OF MEASURE: VOLTS

IC201

PIN NO.	FM	AM
1	3.00	3.00
2	3.00	3.00
3	3.00	3.00
4	0.75	0.70
5	1.11	0.94
6	0.75	0.70
7	1.19	1.00
8	0.75	0.70
9	1.24	1.04
10	0.75	0.70
11	1.27	1.07
12	0	0
13 , 14	3.00	3.00

IC202

PIN NO.	FM	AM
1	3.00	3.00
2	3.00	3.00
3	3.00	3.00
4	0	0
5	1.05	0.88
6	0.75	0.70
7	0.94	0.79
8	0.75	0.70
9	0.97	0.82
10	0.75	0.70
11	1.05	0.88
12	0	0
13 , 14	3.00	3.00

IC203

PIN NO.	FM	AM
1	3.00	3.00
2	3.00	3.00
3	3.00	3.00
4	3.00	3.00
5	0	0
6	3.00	3.00
7	3.00	3.00
8	0	0
9	3.00	3.00
10	0	0
11	3.00	3.00
12	3.00	3.00
13	3.00	3.00
14	0	0
15 , 16	3.00	3.00

IC204

PIN NO.	FM	AM
1	– 1.38	– 1.37
2	0	0
3	0	0
4	3.00	3.00
5	1.20	1.20
6	1.11	1.11
7	0.68	0.69
8	0.01	0.01
9	0.01	0.01
10	0	0
11	1.40	1.39
12	2.88	2.88
13 , 14	0	0

IC208

PIN NO.	FM	AM
1	4.6	4.6
2	4.6	4.6
3	0	0
4	0	0
5	6.0	6.0

IC206

PIN NO.	FM	AM
1	3V	3V
2	0	0
3	6V	6V

IC205

PIN NO.	FM	AM
1-15	LCD SEGMENT	
16	1.57	1.57
17	3.20	0
18	0	3.20
19	0	0
20	0	0
21-24	LCD back plane	
25	3.22	3.22
26	3.22	3.22
27	2.15	2.15
28	1.08	1.08
29	3.00	3.00
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	3.0	3.0
38	3.20	3.20
39	3.00	3.00
40	3.00	3.00
41	3.00	3.00
42	3.00	3.00
43	3.00	3.00
44	3.00	3.00
45	3.00	3.00
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
53	3.22	3.22
54	3.22	3.22
55	0	0
56	3.22	3.22
57	0	0
58	1.47	1.47
59	1.50	1.50
60	3.1	3.1
61	3.22	3.22
62	3.22	3.22
63	3.22	3.22
64	3.22	3.22
65	3.22	3.22
66	3.22	3.22
67	3.22	3.22
68	3.22	3.22
69-80	LCD SEGMENT	

TRANSISTORS

		FM	AM
Q1	S	0	0
	G	0	0
	D	4.02	0
Q2	E	0	0
	B	0.65	0
	C	4.00	0
Q3	S	0	0.43
	G	0	0
	D	0	3.85
Q4	S	0	0.92
	G	0	0
	D	0	3.55
Q5	S	0	0.92
	G	0	0
	D	0	3.55
Q6	S	0	0.78
	G	0	0
	D	0	4.34
Q7	E	0	0
	B	0	0.65
	C	0	1.40
Q8	E	0	0.28
	B	0	0.93
	C	0	2.40
Q9	E	0	4.91
	B	0.01	4.35
	C	0	0.01
Q10	E	0	0
	B	0.56	0
	C	0.01	4.35

		FM	AM
Q11	E	0	0
	B	0.29	0.29
	C	3.00	3.00
Q12	E	0	0
	B	0	0.66
	C	1.38	0.02
Q13	E	0	0
	B	0.66	0
	C	0.02	1.16
Q14	E	5.05	5.00
	B	4.93	4.29
	C	0	4.91
Q15	E	5.05	5.00
	B	4.36	5.30
	C	4.99	0
Q16	E	3.00	3.00
	B	4.35	2.32
	C	0	2.98
Q17	E	2.85	2.85
	B	3.45	3.45
	C	2.86	2.86
Q18	E	0	0
	B	0.64	0
	C	0.01	2.25
Q19	S	0	0.37
	G	0	0
	D	0	4.20
Q20	E	0	0
	B	0	0.04
	C	0	0

		FM	AM
Q21	E	0	0
	B	0	0.64
	C	0	0.04
Q22	E	0	4.91
	B	0	4.22
	C	0	4.85
Q23	E	0	4.91
	B	0	4.78
	C	0	4.22
Q24	E	0	0
	B	0.75	0.75
	C	2.64	2.64
Q25	E	0.75	0.75
	B	1.40	1.40
	C	1.68	1.68
Q26	E	0	0
	B	0.74	0.74
	C	2.04	2.04
Q27	E	0	0
	B	0	0
	C	0	0
Q28	E	0	0
	B	0	0
	C	0	0
Q29	S	10.15	1.97
	G	9.97	1.78
	D	14.90	2.77
Q30	E	0	0
	B	0.53	0
	C	0.68	0

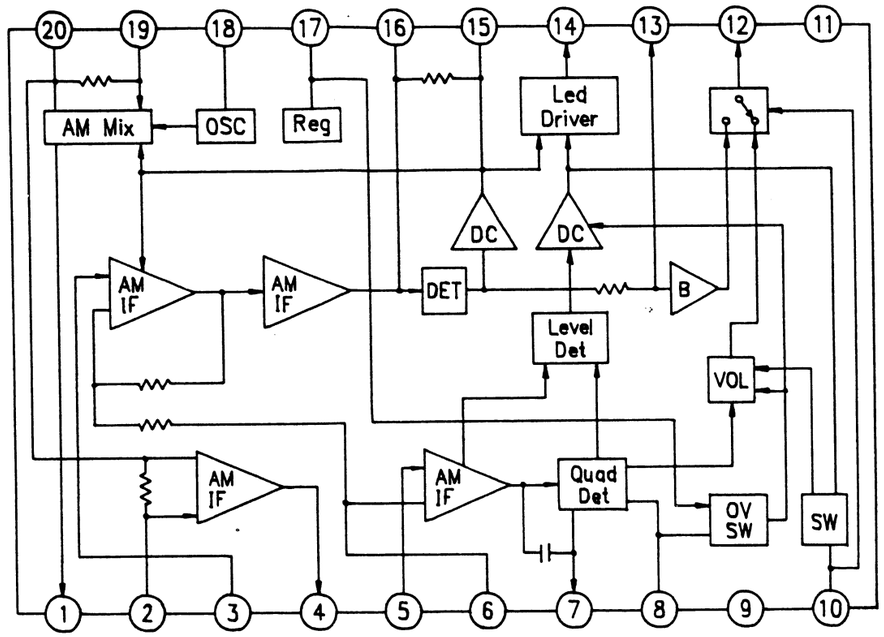
		FM	AM
Q31	E	0	0
	B	0.68	0
	C	5.81	0
Q32	E	5.97	5.97
	B	5.27	5.96
	C	5.87	0
Q33	E	5.15	5.13
	B	5.84	5.83
	C	5.97	5.97
Q34	E	6.00	6.00
	B	5.31	5.31
	C	5.97	5.97

		FM	AM
Q201	E	0	0
	B	0.61	0
	C	0.07	5.30
Q202	E	0	0
	B	0	0.61
	C	4.93	0.07
Q203	E	0	0
	B	0	0
	C	0.46	5.96
Q204	E	0	0
	B	0.66	0.66
	C	0.07	0.07
Q205	E	6.00	6.00
	B	6.00	6.00
	C	0.75	0.70
Q207	E	0	0
	B	0	0
	C	6.00	6.00
Q208	E	6.00	6.00
	B	5.42	5.42
	C	3.52	3.52
Q209	E	0	0
	B	0.48	0.48
	C	5.32	5.32
Q210	E	0	0
	B	0.53	0.53
	C	0.48	0.48

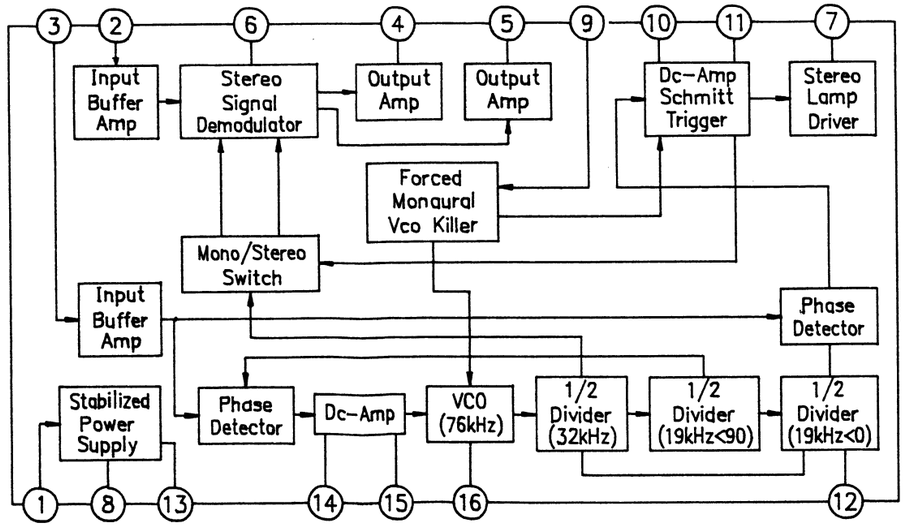
		FM	AM
Q211	E	0	0
	B	0.51	0.51
	C	1.35	1.35
Q212	E	3.22	3.22
	B	2.70	2.70
	C	3.21	3.21
Q213	E	3.00	3.00
	B	4.42	4.42
	C	3.22	3.22
Q214	S	0.93	0.94
	G	0.68	0.69
	D	2.63	2.63
Q215	E	0	0
	B	0.61	0.61
	C	9.3	9.3
Q216	E	0	0
	B	0	0
	C	4.42	4.42

IC BLOCK DIAGRAM

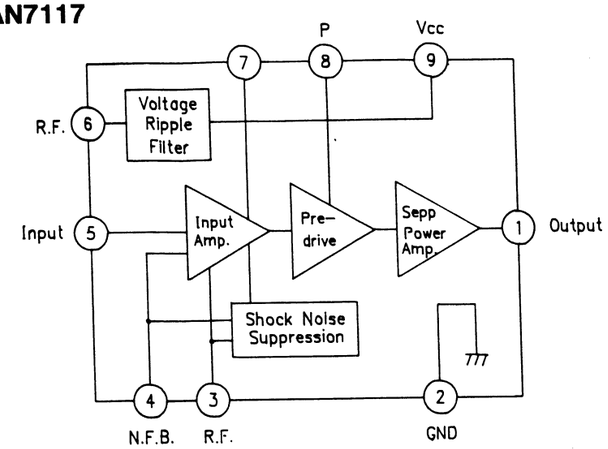
(1) IC1-TA7758P



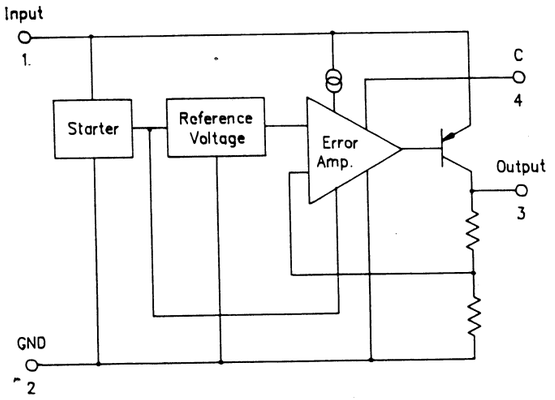
(2) IC2-AN7415S



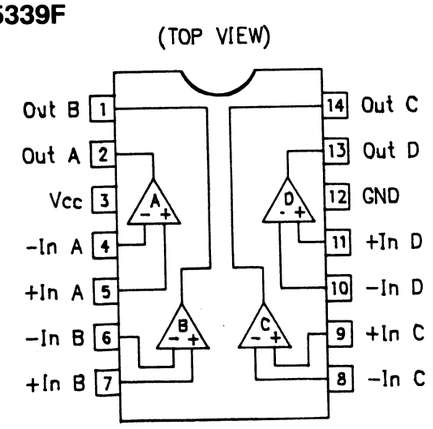
(3) IC3, 4-AN7117



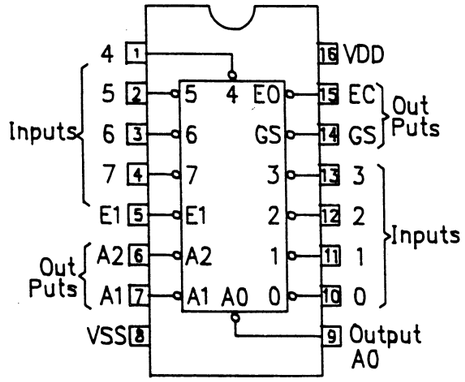
(4) IC5-LA5003



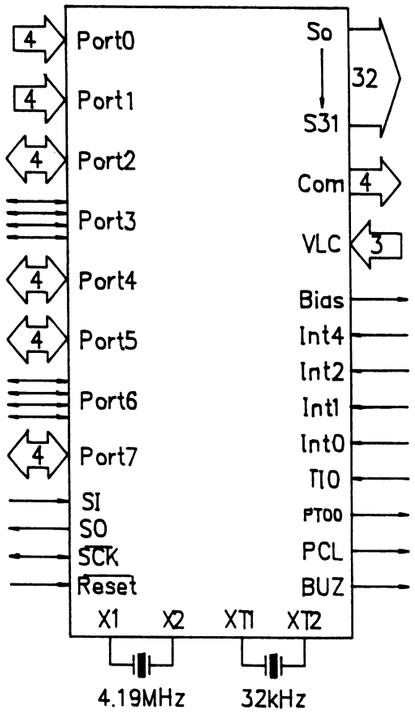
(5) IC201, 202-TA75339F



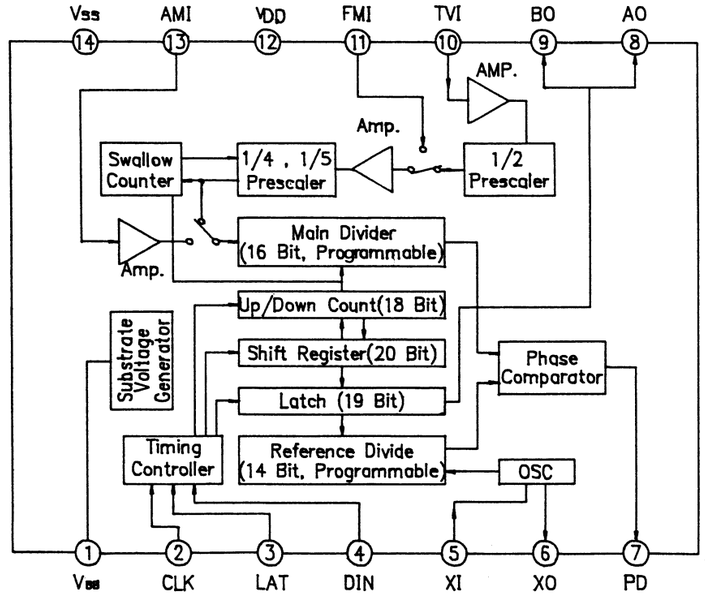
(6) IC203-TC40H148F



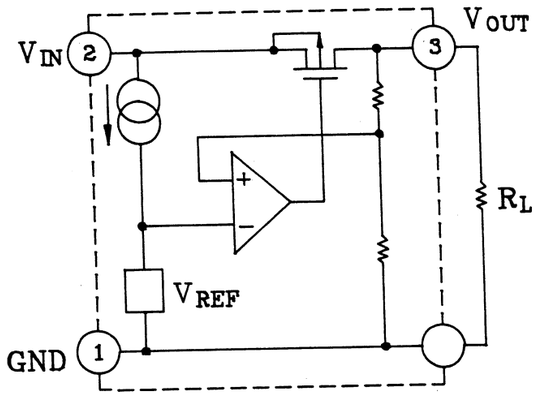
(8) IC205-uPD75308GF-508-3B9



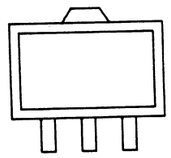
(7) IC204-CXD1118M-1



(9) IC206-S-81230AG-RB-T2



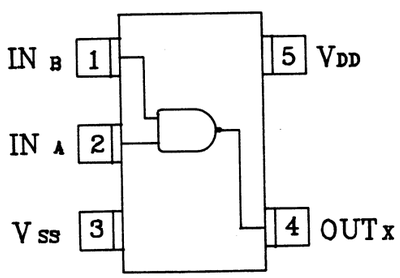
TOP VIEW



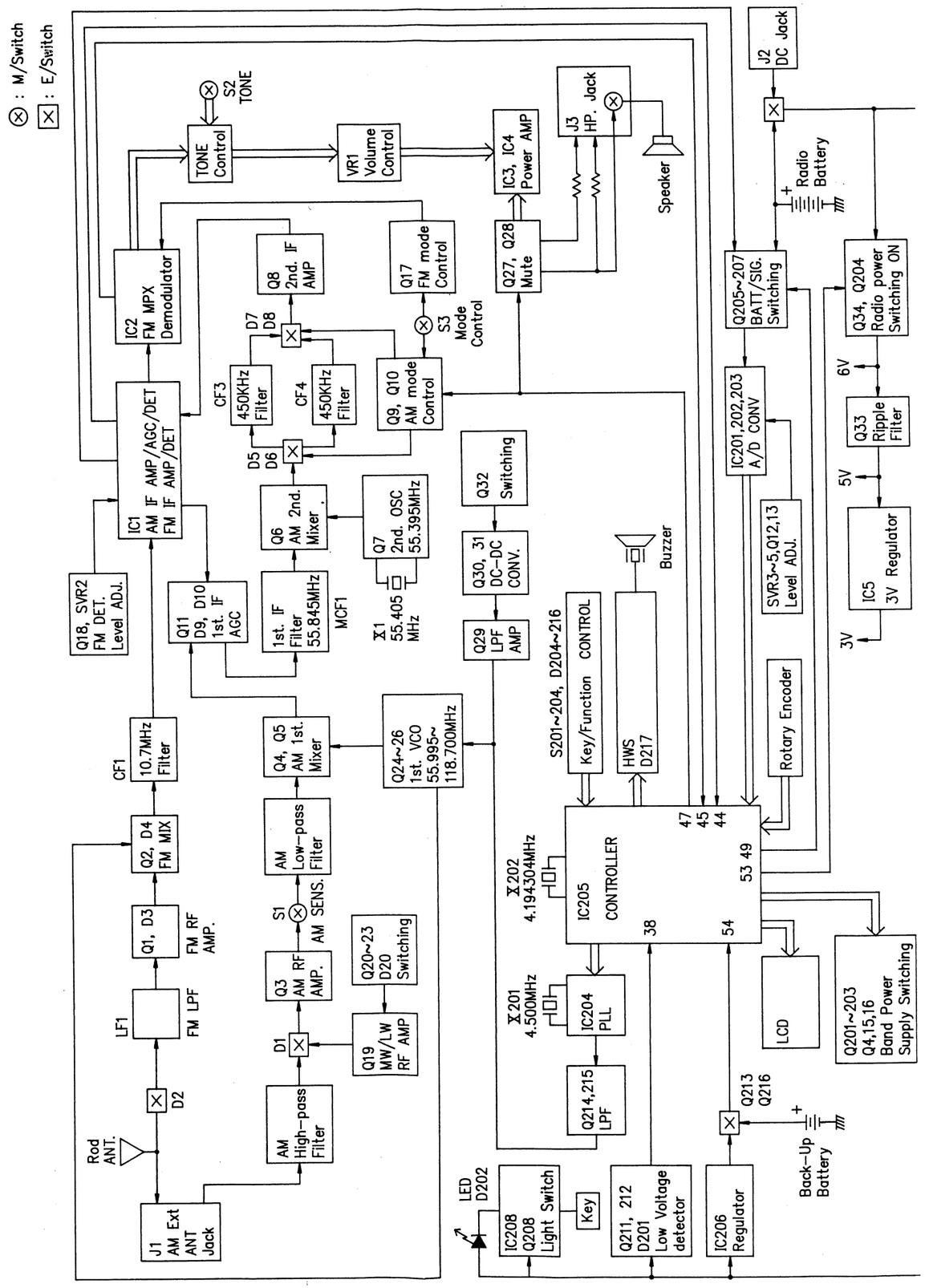
NO.	S-802	S-812
1	VOUT	GND
2	GND	VIN
3	VIN	VOUT

(10) IC208-TC4S11F

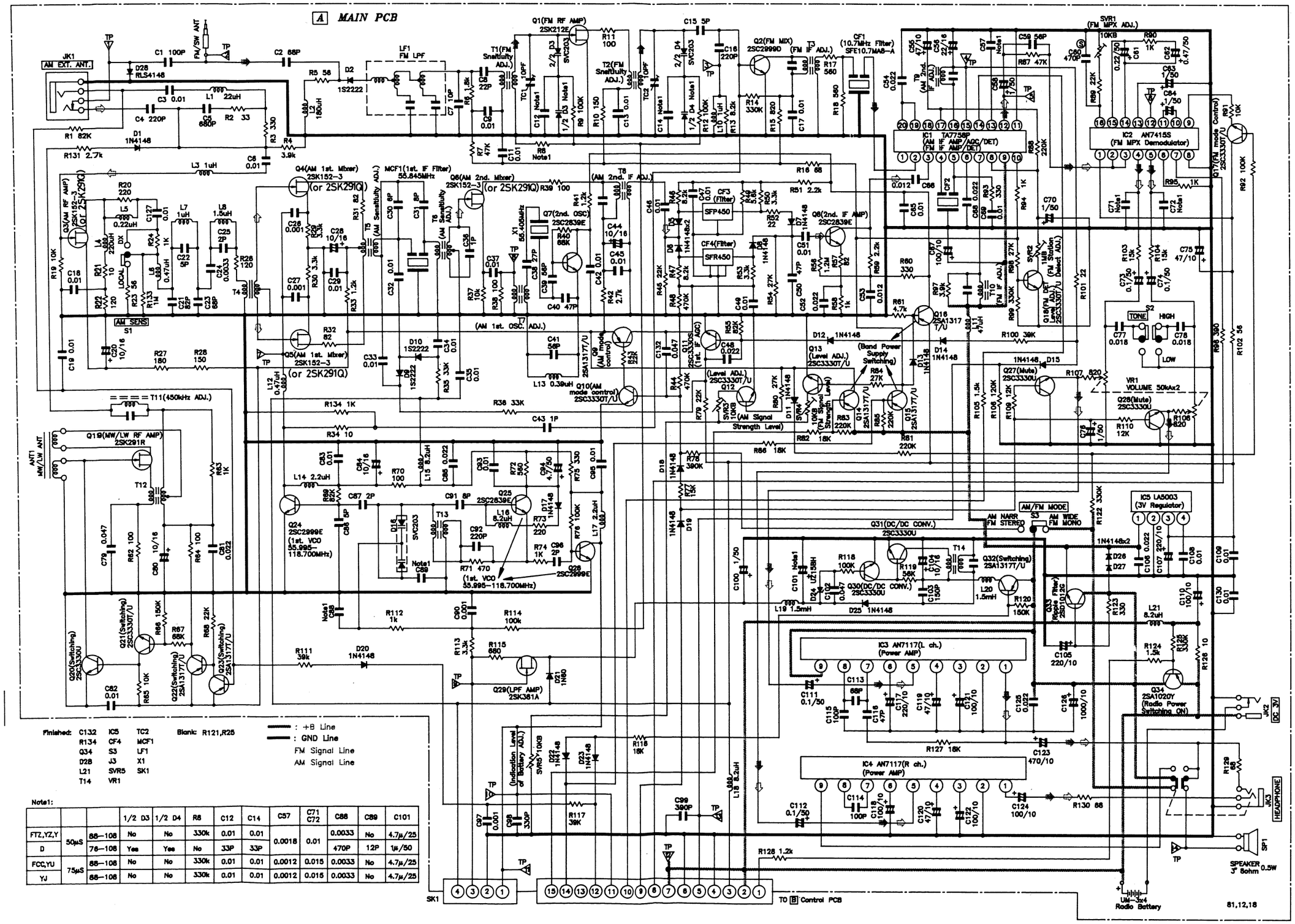
(TOP VIEW)



BLOCK DIAGRAM



SCHEMATIC DIAGRAM-1

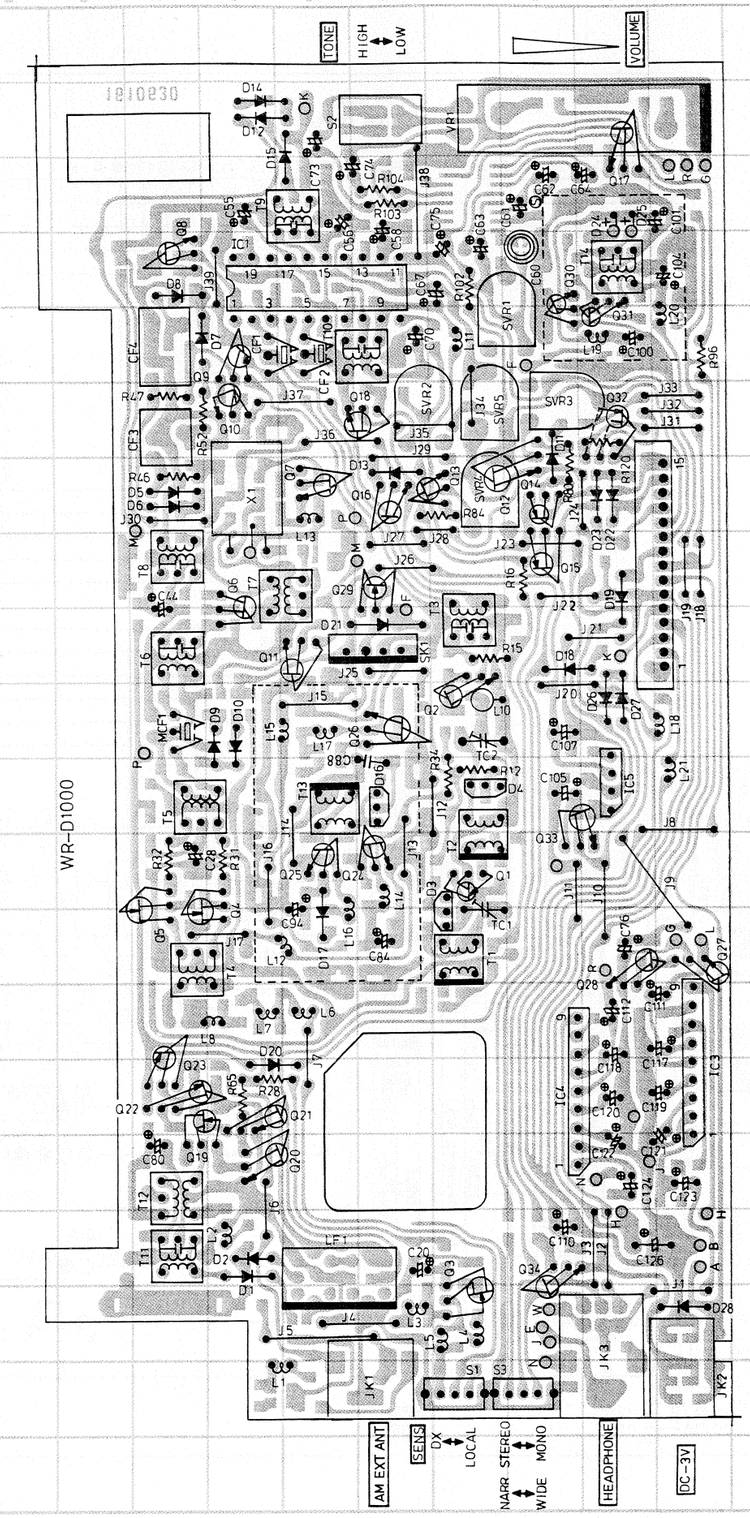


Note1:

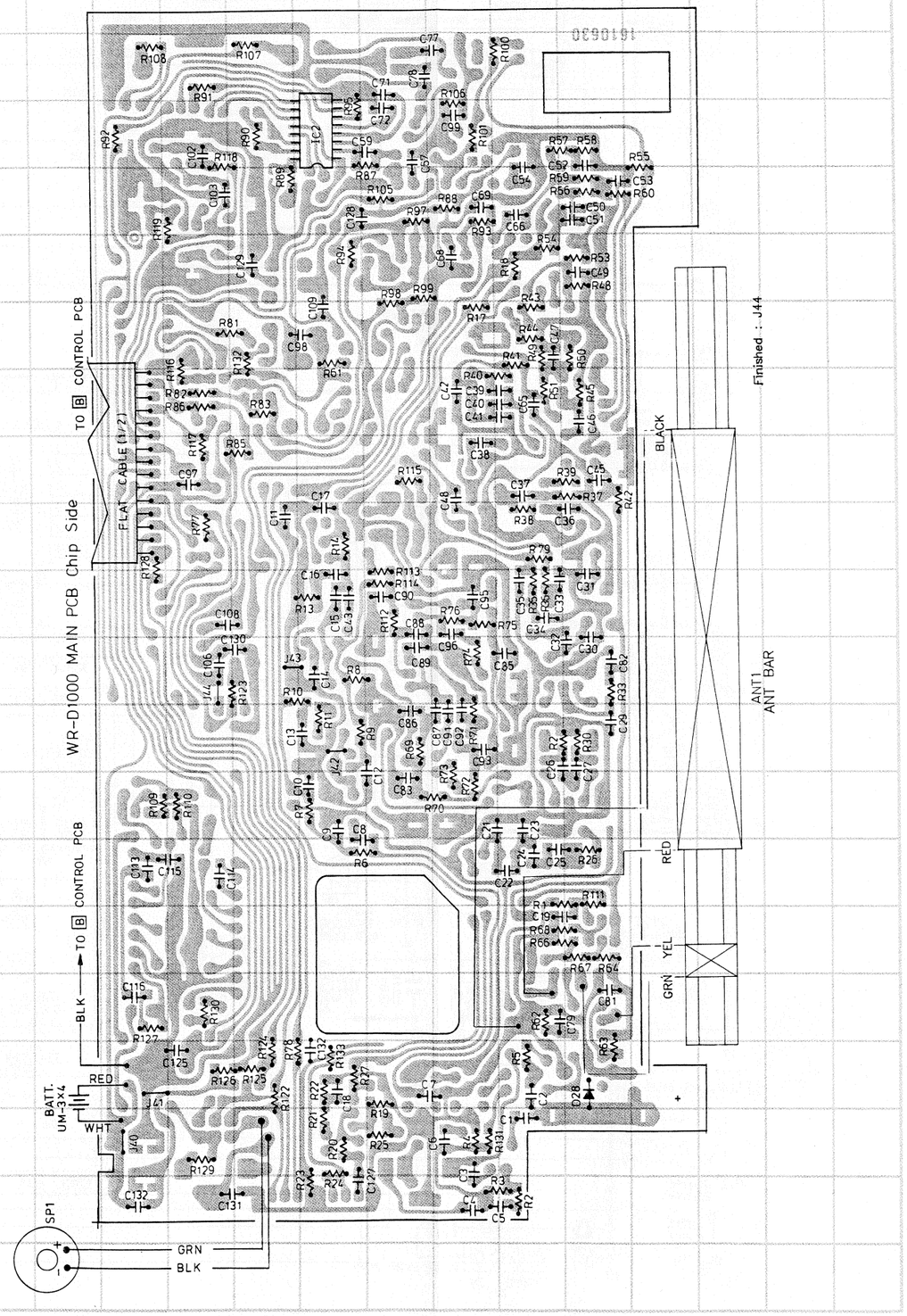
			1/2 D3	1/2 D4	R8	C12	C14	C57	C71 C72	C88	C89	C101
FTZ,YZ,Y	50μS	88–108	No	No	330k	0.01	0.01	0.0018	0.01	0.0033	No	4.7μ/25
D		76–108	Yes	Yes	No	33P	33P			470P	12P	1μ/50
FCC,YU	75μS	88–108	No	No	330k	0.01	0.01	0.0012	0.015	0.0033	No	4.7μ/25
YJ		88–108	No	No	330k	0.01	0.01	0.0012	0.015	0.0033	No	4.7μ/25

WIRING-1

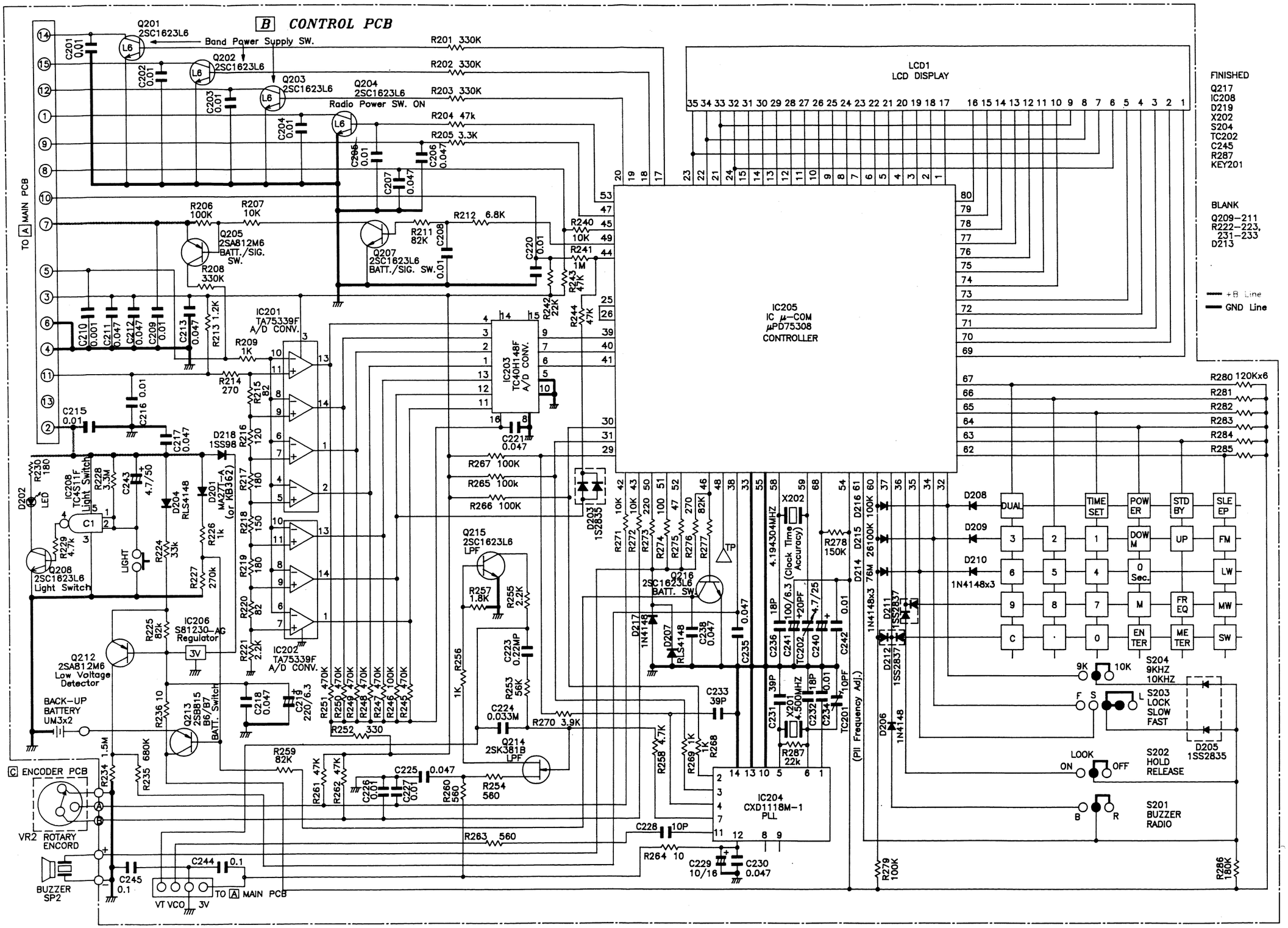
A MAIN PCB [TOP VIEW]



A MAIN PCB [BOTTOM VIEW]

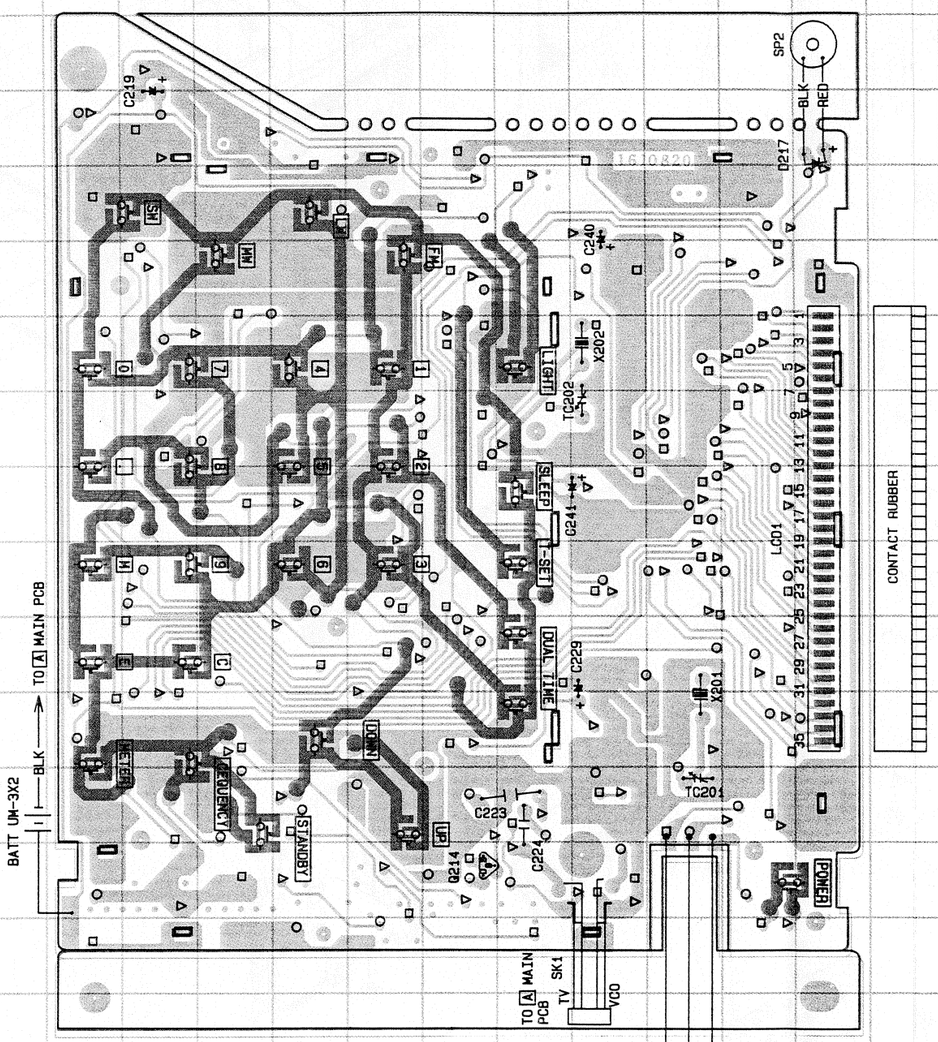


SCHEMATIC DIAGRAM-2



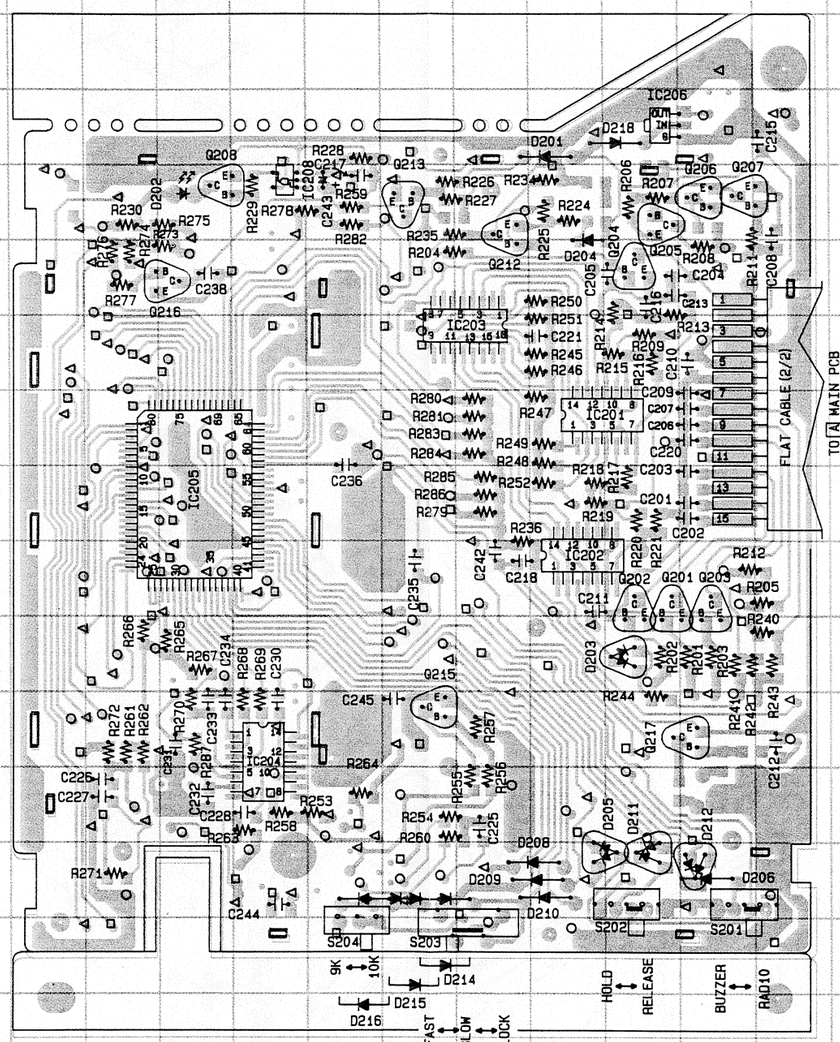
WIRING-2

B CONTROL PCB [TOP VIEW]

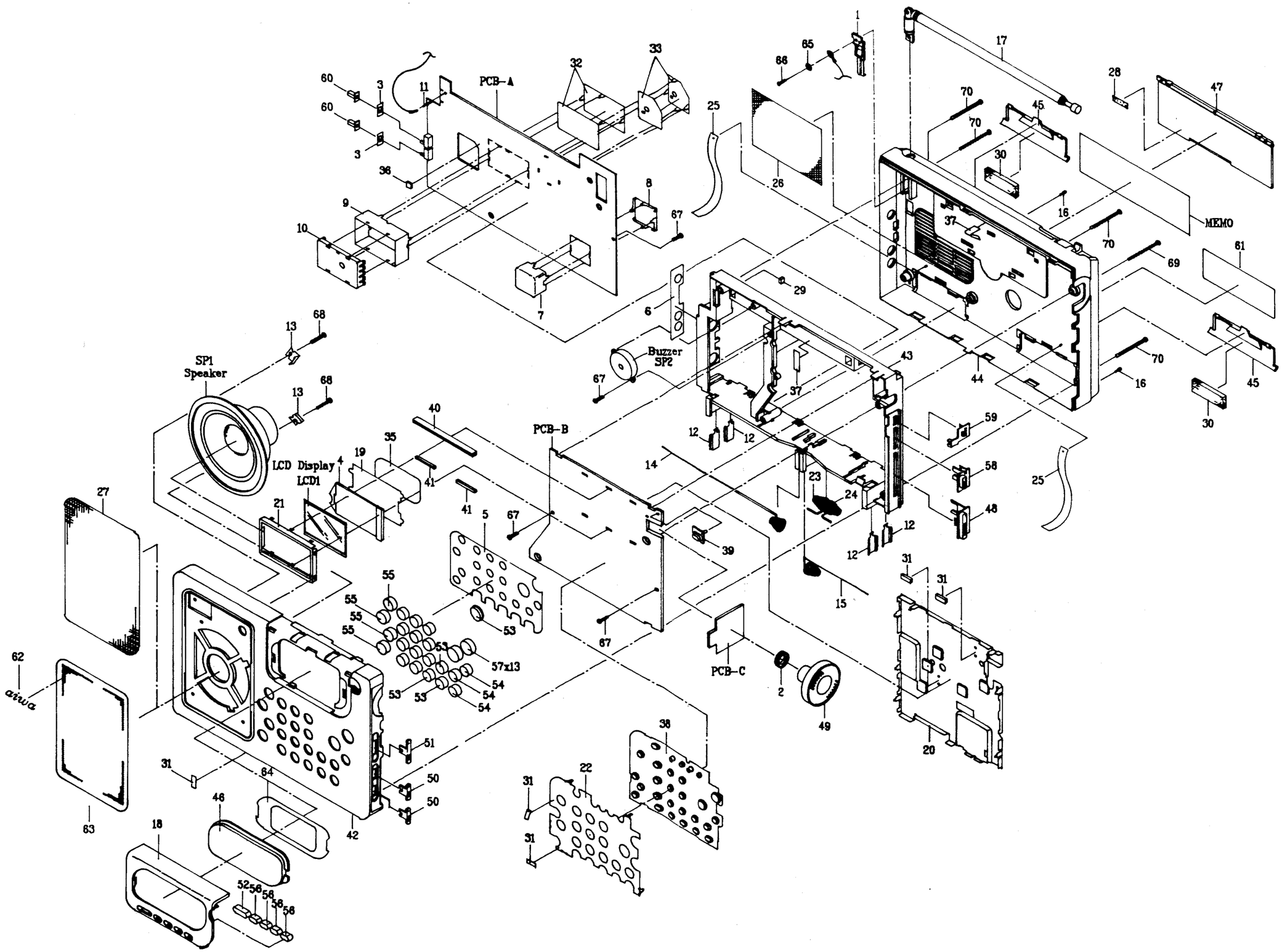


			D214	D215
YZ, YJ	FTZ	88-108	No	No
D	JA	76-108	Yes	No
YU	FCC	88-108	No	No
Y		88-108	No	No

B CONTROL PCB [BOTTOM VIEW]



EXPLODED VIEW



MECHANICAL PARTS LIST

REF. NO.	PART NO.	CODE	DESCRIPTION	COMMO MODEL	Q'TY
1	★S2-049-010-000	0E	ROD ANT HOLDER	*	1
2	★S2-049-020-000	0E	TUNING HOLDER	*	1
3	★S2-049-030-000	0E	SWITCH SPACER	*	2
4	★S2-067-000-000	1B	LCD ILLUMINATOR	*	1
5	★S2-067-010-000	1B	KEYBOARD SPACER	*	1
6	★S2-067-020-000	1A	PVC SHEET	*	1
7	★S2-149-020-000	–	DC/DC SHIELD (UP)	*	1
8	★S2-149-030-000	–	DC/DC SHIELD (DOWN)	*	1
9	★S2-149-040-000	–	VCO SHIELD (FRAME)	*	1
10	★S2-149-050-000	–	VCO SHIELD (COVER)	*	1
11	★S2-149-120-000	–	ANT. TERMINAL PIN	*	1
12	★S2-149-070-000	1A	BATTERY CONTACT PLATE(+)	*	4
13	★S2-149-080-000	0E	SPEAKER FIXER	*	2
14	★S2-149-090-000	1A	BATT. CONT. SPRING(–)(B)	*	1
15	★S2-149-100-000	1A	BATT. CONT. SPRING(–)(C)	*	1
16	★S2-449-000-000	–	FOOT RUBBER	*	2
17	★S3-604-902-000	2A	ROD ANT	*	1
18	★S3-456-783-000	1B	PANEL A	*	1
19	★S2-167-000-000	–	LCD SHIELD	*	1
20	★S2-167-010-000	–	CONTROL PCB SHIELD	*	1
21	★S2-167-020-000	1A	LCD(DISPLAY) HOLDER	*	1
22	★S2-167-030-000	1B	KEYBOARD SHIELD	*	1
23	★S2-167-040-000	0E	BATT. CONT. SPRING(–)(A)	*	1
24	★S2-167-050-000	0E	BATT. CONT. SPRING(–)(D)	*	1
25	★S2-249-010-000	–	RIBBON	*	2
26	★S2-249-020-000	1A	BACK SALON NET	*	1
27	★S2-267-000-000	1A	SPEAKER HEMELON	*	1
28	★S2-316-010-000	–	SPACER	*	1
29	★S2-335-060-000	–	BAR ANT SPACER(II)	*	1
30	★S2-348-020-000	0E	BATTERY EVA	*	2
31	★S2-349-030-000	–	SHIELD EVA	*	5
32	★S2-349-050-000	–	1st OSC SHIELD MYLAR	*	1
33	★S2-349-060-000	–	2nd OSC SHIELD MYLAR	*	1
35	★S2-367-000-000	1A	LCD MYLAR	*	1
36	★S2-449-050-000	–	RUBBER SPACER	*	1
37	★S2-265-000-000	–	P.C.B HEMELON (0.3)	*	2
38	★S2-467-010-000	1E	KEYBOARD RUBBER	*	1
39	★S2-467-020-000	0E	POWER RUBBER	*	1
40	★S2-467-030-000	1B	CONTACT RUBBER	*	1
41	★S2-467-040-000	–	SPACE RUBBER	*	2
42	★S3-016-783-000	1F	FRONT CABINET	*	1
43	★S3-024-902-000	1E	MIDDLE CHASSIS	*	1
44	★S3-036-783-000	1H	BACK COVER	*	1
45	★S3-046-783-000	1A	BATTERY COVER	*	2
46	★S3-056-783-000	1B	LCD WINDOW	*	1
47	★S3-064-983-000	1C	BACK SUPPORTER	*	1
48	★S3-114-901-000	0E	VOLUME KNOB	*	1
49	★S3-126-783-000	1C	TUNING KNOB ASS'Y	*	1
50	★S3-146-783-000	0E	SW. KNOB A	*	2
51	★S3-156-783-000	0E	SW. KNOB B	*	1
52	★S3-166-783-000	0E	LIGHT KEY KNOB	*	1
53	★S3-176-783-000	1C	P/M/C/E KEY KNOB ASS'Y	*	1
54	★S3-186-783-000	0E	FREQUICE KNOB	*	3
55	★S3-196-783-000	1A	BAND KNOB ASS'Y	*	1
56	★S3-206-783-000	0E	TIME-KEY KNOB	*	4
57	★S3-216-783-000	1C	KEY KNOB ASS'Y	*	1
58	★S3-224-901-000	0E	TONE KNOB	*	1
59	★S3-234-901-000	–	9K-10K SW. KNOB	*	1
60	★S3-244-902-000	0E	SELECT KNOB	*	2

REF. NO.	PART NO.	CODE	DESCRIPTION	COMMON MODEL	Q'TY
61	★S3-406-783-000	-	ID PLATE [D]	*	1
61	★S3-406-788-000	-	ID PLATE [YU1,YZ1,Y1]	*	1
61	★S3-406-789-000	-	ID PLATE [YJ1]	*	1
62	★S3-416-783-000	1D	AIWA BADGE	*	1
63	★S3-436-783-000	1E	SP GRILL	*	1
64	★S3-446-783-000	1B	DISPLAY PLATE	*	1
65	★S9-910-010-000	1B	WASHER INNER GEAR 2.8mm	*	1
66	★S9-002-052-000	0E	M SCREW 2.6x5 P Ni	*	1
67	★S9-101-052-000	0E	TP SCREW 2x5 P Ni	*	4
68	★S9-102-082-000	0E	TP SCREW 2.6x8 P Ni	*	2
69	★S9-202-221-000	0E	TAP SCREW 2.6x22 P (ZK)S	*	1
70	★S9-202-281-000	0E	PTP SCREW 2.6x28 BL(S)	*	4

ACCESSORIES/PACKAGE LIST

REF. NO.	PART NO.	DESCRIPTION		Q'TY	CODE
1	★S3-816-783-000	INSTRUCTION BOOK,D		1	1F
2	★S3-816-788-000		INSTRUCTION BOOK,EX	1	
3	★S3-800-283-000	WAVE HANDBOOK,D		1	1C
4	★S3-800-288-000	WAVE HANDBOOK,EX		1	
5	★S3-850-083-000	HEADPHONE	HEADPHONE	1	2B
6	★S3-826-783-000	CARRYING CASE	CARRYING CASE	1	2M
7	★S3-836-783-000	ADAPTOR		1	2B
8	★S3-866-783-000	REEL ANTENNA	REEL ANTENNA	1	2M

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